

Exhibit E - User's Manual

User's Guide

SCANNER

DP36 Series

FCC Statement

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

User's Guide

Introduction

This guide shows you how to scan an image into the bundled image editing software, Photo Express 2.0, using the scanner's TWAIN program. You can also use the TWAIN program to scan from any other image editing, OCR, or other programs that can accept scans. Typically, you may do so by using the familiar *Get* and *Scanner* commands (various programs may use slightly different procedures.)

Getting ready

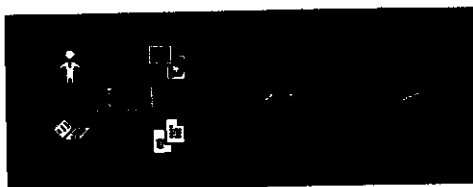
1. Click on the **Start** button at the lower left corner of your PC screen. Choose **Programs**, then **Ulead Photo Express 2.0** and then **Ulead Photo Express 2.0** again to open the application.
2. To scan for the first time, click **Get** button, then click **Scanner**.
3. Choose the proper Twain driver of scanner from pull-down manual on the top right corner.
4. Click **Acquire** on the right bottom corner to call the TWAIN user interface.
5. The TWAIN User's Interface (U.I.) appears. The TWAIN interface is where you really start scanning.

Start scanning

Before starting, first place the scan target (photo, document, or others) face down aligned with the center of the glass (where marked "V"). Close the scanner lid, making sure that the scan target does not move while you close the lid.

Using TWAIN interface, Scanning is as easy as 1-2-3!

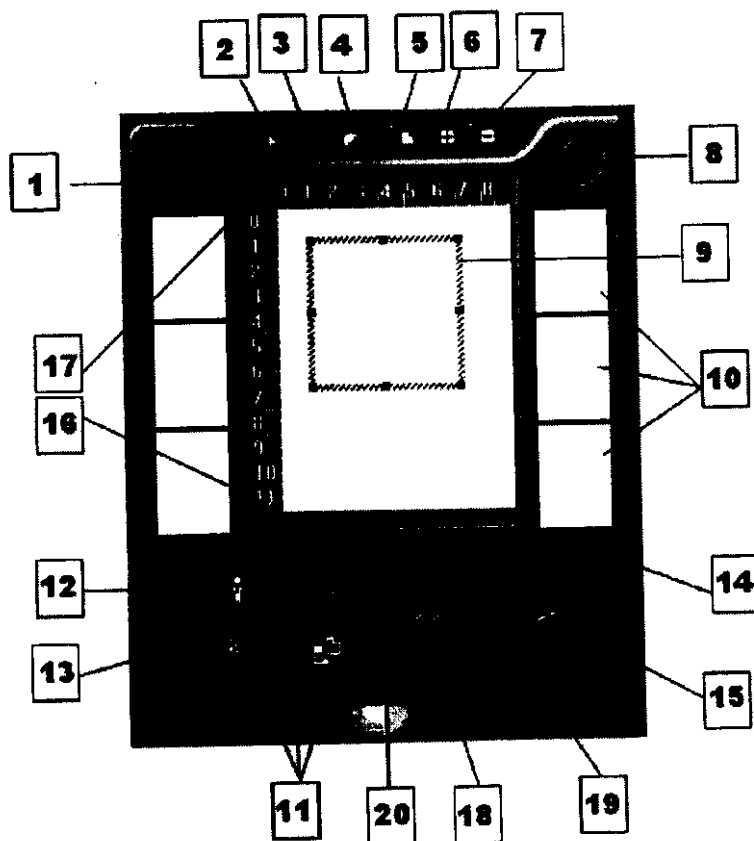
- 1.) Select the type of image to scan.
Select one of the three buttons: **Photo**, **Document** or **Magazine and Book**. TWAIN program will automatically determine the best settings to use for scanning. (You may change any default settings if you desire, and save all the changes for later use utilizing User Defined command.)
- 2.) Click **Preview**.
Click on the Preview button, this will activate the scanner. The image you are about to scan is shown in the main preview window. Adjust the size and make any other changes you like.
- 3.) Click **Scan**.
After previewing the images and making any changes, click on the Scan button. Sit back while your image is being scanned. Within a short time the result will be delivered to the Photo Express 2.0. (If you decide not to do more scanning, close TWAIN interface by clicking on the Power Off button at the upper left corner. See also "7. Power Off" in TWAIN User's Interface section.)



To make sure your scan comes out as best as possible, please spend a few minutes to familiarize yourself with functions described in the next TWAIN User's Interface section.

TWAIN User's Interface

Part I: For Beginners





Contains information on how to contact us.

2. Selection



Lets you select scan areas.

Selection allows you to activate a specific scan area by drawing a rectangular crop frame over the image. To adjust the size, follow instructions in "5. Scan size".

3. Zoom



Zoom in or zoom out the viewing area.

Zoom lets you take a more detailed look at what you are scanning. Click the Zoom button and then move the magnifying glass cursor over the area you would like to zoom in and click the left mouse button. To zoom out, click the right mouse button.

4. Scan Speed



Press this button, this will pop up a menu which contains two items, speed mode and quality mode.

- speed mode - with data compression and faster speed.
- quality mode - without data compression but better quality.

5. Scan Size



Select size of the scanning area.

There are 6 built-in size settings (Letter, A4, A5, B5, Business Card and Auto) that you may select from. **Auto** option is provided to automatically crop the edges of your images for scanning. You can also manually select the size by adjusting the crop frame in the preview window. To adjust the size, move your mouse cursor over one of the 8 handles (they look like small black rectangularers) around the perimeter of the crop frame. The cursor will change shapes, continue pressing the left mouse button and drag the cursor to adjust the shape.

6. Add Selection



Add additional scan areas for batch scanning.

Click on the **Add Selection** icon to create another crop frame. You may scan more than one area with different settings by a single click on the scan command. For example, one can be designated with color scan mode and the other may be with grayscale. The two designations can then be manipulated and scanned separately.

7. Delete Selection



Remove specific active scan areas.

To delete, select the specific crop frame and then click on the Delete Selection button.

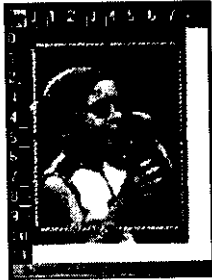
8. Power Off



Click here to close the TWAIN interface.

When you want to leave the TWAIN User's Interface, click on **Power Off** button. Follow steps 2-4 from the *Getting ready* section to reopen the TWAIN interface.

9. Main preview window



Displays a preview of the image to be scanned.

Here you can see how your scan will appear after scanning. The crop frame shows you the area of the image that will be scanned.

10. Alternative preview image



Provides an alternative look of the preview image.

In addition to a preview image inside the main preview window, there are six thumbnail displays of the image on the right and left side of the window. Each represents an alternative look of the preview image. You can replace the image inside the main preview window with any preferred alternative. The main preview window will apply the setting from the chosen alternative preview window as soon as you click on one of the six..

11. Document Magazine and Book Photo



Lets you select the type of scan target.

Click on a specific icon and then you can activate settings recommended for that particular type of scan target: **Document** for black and white documents, **Photo** for color photos, and **Magazine and Book** for magazines and books with graphics.

12. User Defined



Click here to save , edit and select your preferred settings.

User Defined includes three options: save current settings, edit and select previously saved settings. You can create your own settings and save them for future use at any time by simply clicking on Save Current Setting. Choose the Edit command and you can call up saved settings for editing whenever you desire. All previously saved settings are listed by their names under the Edit command. To select any settings for your current scan task, click on the desired name and its settings will be immediately applied.

13. Scan Mode



Lets you choose the color mode to scan.

There are four modes that you can select for scanning: True Color, Grayscale, Line Art (Black and White) and Halftone.

True Color 

Grayscale 

Lineart 

Halftone 

14. Message/Progress bar



Gives you a quick look at the size of the image to be scanned./Tells you the progress of the scan task.

The message bar tells you the size of the image in "width x height" and converts it into disk space needed in "Kilobytes (KB)". When the scanning is taking place, the message bar turns into a progress bar.

15. Scan/Abort



Click here to scan the image or to abort the scanning.

Click on the Scan button after you have made all your selections. When the scanning starts, **Preview/Scan** icon changes into an **Abort** button. Press this button if you decide to cancel the scanning. You can also abort a scan by pressing the ESC key on your keyboard.

16. Preview range indicator



Lets you set the range for previewing.

Preview range indicator is a red Δ located by the left of the preview window. It specifies the range of the preview task, only the portion above the indicator is to be previewed.

17. Unit



Lets you switch between "cm" and "in".

18. Preview



Click here to preview the image.

Preview lets you quickly view the image you are about to scan. It helps to select the scanning area and preview effects of different settings before scanning.

19. Resolution



Lets you select frequently used resolutions for scanning.

Resolution is the level of detail in an image, expressed in dots per inch (dpi). High resolution value produces sharper image but takes more time and memory.

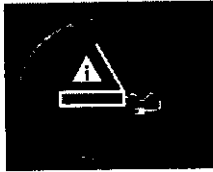
20. Advanced Settings



Click here to evoke the advanced settings dialog box.

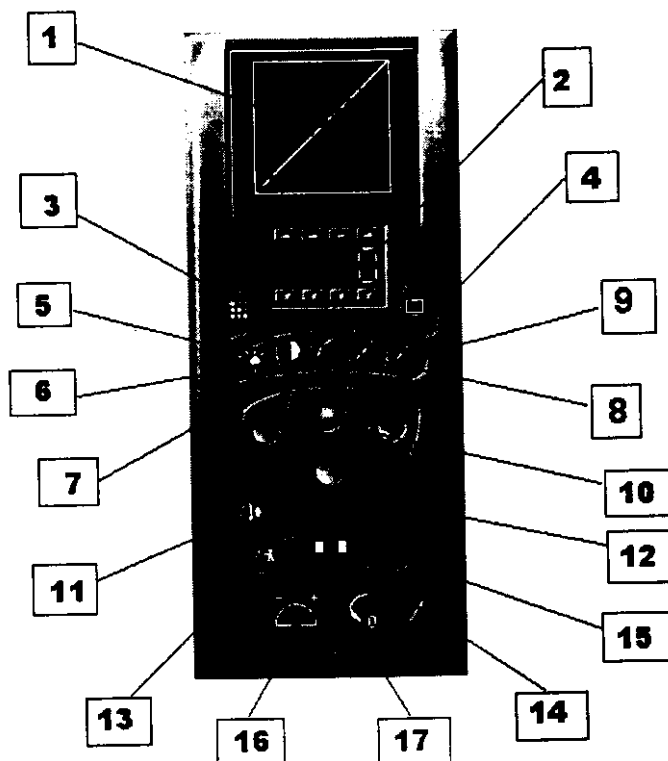
For more detail setting, click here to customize features such as resolution, brightness, contrast Refer to Part II for more advanced settings.

Check Scanner



If the scanner is not correctly installed, the Check Scanner button appears instead of the Preview/Scan button. See Quick Reference guide for more help.

Part II: For Advanced Users





1. Display window





This is a display window for the settings you specify.

2. Liquid Crystal Display (LCD) box



LCD box is where you enter or adjust the value of resolution, exposure, brightness, contrast, gamma, highlight and shadow. Each digit can be adjusted individually. Press  button to increase the value and  to decrease it. For example, when you want to change a resolution value from 320 to 150, follow these two steps:

- 1) Press down  under digit 3 and hold until it becomes 1.
- 2) Press down  above digit 2 and hold until it becomes 5.

3. Resolution (10 to 9600/19200 dpi)



The higher the resolution you set, the sharper output you will get. Higher resolution, however, unnecessarily increases the file size and scanning time. The suggested resolution

for e-mail or OCR is 150dpi. Over 300dpi is suggested to be used for images needed to be printed out. To adjust the resolution, see instructions in "2. Liquid Crystal Display (LCD) box". Resolution over 600dpi is done by software enhancement which requires huge memory and hard disk space.

4. Color Matching



Color Matching function provides the best accuracy and consistency of the scanned color image.

On - with Color Matching function
Off - without Color Matching function

5. Brightness (-127 to 128 for Line Art mode and -100 to 100 for other scan modes)



Brightness is the balance of light and dark shades in an image. Increasing the value creates a brighter image and vice versa. To adjust the brightness, see instructions in "2. Liquid Crystal Display (LCD) box".

6. Contrast (-100 to 100)



Contrast is the range between the darkest and lightest shades in an image. It determines the number of shade you get. When the contrast value is increased, the high-toned areas of an image become lighter and the low-toned areas become darker. To adjust the contrast, see instructions in "2. Liquid Crystal Display (LCD) box".

7. Gamma (-100 to 100)



Gamma is the slope of the line that represents output value versus input value. Adjusting of the gamma changes the mid-toned areas of an image without dramatically affecting its highlights and shadows. To adjust the gamma, see instructions in "2. Liquid Crystal Display (LCD) box".

8. Highlight (-100 to 100)



Highlight is the lightest portion of an image. Its value can range from -100 to 100. To increase the lightness of an image, increase the highlight value and vice versa. To adjust the highlight, see instructions in "2. Liquid Crystal Display (LCD) box".

9. Shadow (-100 to 100)



Shadow is the darkest portion of an image. When the shadow is set to a higher value, the image becomes brighter. To adjust the shadow, see instructions in "2. Liquid Crystal Display (LCD) box".

10. R, G, B, Master and True Gray Channel



Allow you to adjust the brightness, contrast, gamma, highlight and shadow of an image through four different channels. In Color scan mode, they are Red, Green, Blue and Master Channel which allows simultaneous adjustment for red, green and blue. In Grayscale/Lineart/Halftone scan modes, they are Red, Green, Blue and True Gray Channel (for CP models only).

Channel selection tip:

When scanning in Grayscale, Lineart or Halftone, choose True Gray channel to obtain the best scan output.

11. Filters



Filters allow you to create special effects for your images. Options include Average, Blur, Sharp, Edge Enhance and De Screen. Click on Filters and then choose your preferred options. Changes will be immediately applied to the main and six alternative preview images.

12. Halftone Pattern



Halftone is a type of single-bit image composed of black dots that create the illusion of shades of gray. There are 12 patterns to let you choose from when the scanning is set in Halftone mode. To use, simply click on Halftone Pattern icon and then select your desired pattern. The change will be applied to the image in the preview window in real time.

13. Invert



The Invert tool allows you to convert colors of an image into complementary color values. For example, blue turns into yellow and black turns into white. This tool is mostly used for producing special effects for your images.

14. Remove Dark Edge



When the scan target is not properly placed on the glass under the lid of the scanner, it might cause some unnecessary dark edges around the previewed image. To remove them, first select the image and then click on the Remove Dark Edge button to activate its function. When the image is scanned, these dark edges will be automatically whitened.

15. Deskew



Deskew function is for sheet feed scanners only. It is disabled for all flatbed scanners.

16. Calibrate



Calibration is to adjust your scanner device to ensure accurate scan output. Through the process of calibration, images can be correctly captured by your scanner and then be transferred accurately to your PC monitor. It is suggested that users calibrate their scanners whenever the scanning color is felt shifted.

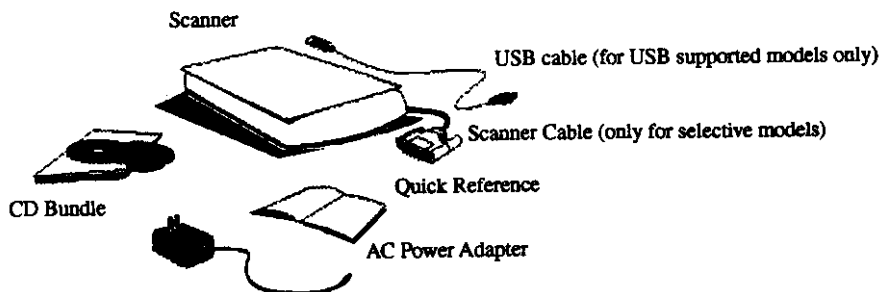
17. Reset



Reset button allows you to clear all the changes you have made and to reset all settings back to their original default value.

Quick Reference **How to set up the Scanner ?**

1. Make sure the following items are included in the package

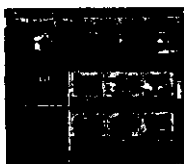


2. Push the lock located at the bottom of the scanner to "unlock" position, and take the lock off if it's removable. (for models with lock devices only).
3. Connect either parallel port OR USB port (if applicable)
 - (1) **Parallel port connection:**
Attach the scanner cable to the scanner and your PC. If a printer is to be used, connect the printer cable into the scanner's printer port. To ensure the best scanning performance, set the parallel port of your PC's BIOS to EPP mode. (To change the BIOS setup, simply press the Delete key on the keyboard while PC is just booting up.)
 - (2) **USB port connection (for USB supported models only):**
Attach the USB cable to the scanner and your PC. Click on the "Cancel" button when "Add New Hardware Wizard" panel appears. If a printer is to be used, connect the printer cable into the PC's parallel port. USB function supports only Win 95 (Release Version 4.00.950 B or OSR2) or Win 98
4. Connect one end of the AC power adapter into the scanner's power jack, and the other end into an AC outlet.
5. After opening Windows, insert the CD into your CD-ROM drive.
The **Setup** program starts automatically. If not, click on the **Start** button, choose **Run** and then type in CD-ROM drive letter followed by: **Setup.exe** in the **Open** box. (e.g. D:\setup.exe)
6. Follow the on-screen instructions to complete the installation.

1.  To install the TWAIN driver
2.  To install OCR program
3.  To install the image-editing software
4.  Exit

How to Scan?

1. Open the lid cover and then place the scan target face down aligned with the center of the glass (where marked "▽").
2. Open **Photo Express 2.0**, the image-editing software.
Click on the **Start** button and then select **Programs → Ulead Photo Express 2.0 → Ulead Photo Express 2.0**.
3. To scan for the first time, click **Get** button, then click **Scanner**.



4. Choose the proper Twain driver of scanner from pull-down manual on the top right corner.



5. Click **Acquire** on the right bottom corner to activate the TWAIN user interface.



6. After the TWAIN User's Interface appears, the scanner is now ready to perform any scan task.



1. Select the type of image to scan.



2. Click **Preview**.



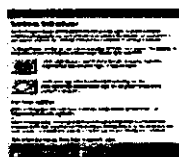
3. Click **Scan**.

✗ Refer to on-line User's Guide for complete instructions of the use of the TWAIN User's Interface. To access this on-line help, select:

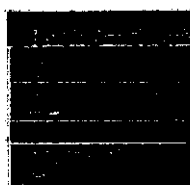
Start → Programs → scanner model → User's Guide.

7. To perform more scanning tasks, simply repeat steps 3 and 5..

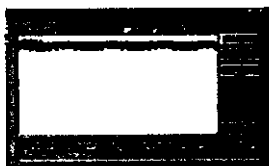
1. Open TextBridge OCR software.
Click on the **Start** button and then select
Programs → TextBridge Classic → TextBridge Classic
2. Read the pop-up instructions, and then click "**Continue**".



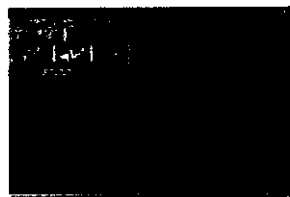
3. Go to "**File**" and choose "**Select Scanner...**".



4. Make sure that the "**TWAIN**" and the correct scanner driver are selected, and then click "**OK**".



5. Click on the "**Auto Process**" button for the latter automatic processing.



Quick Reference **How to perform OCR?**

6. Choose a suitable page type and select **"scanner"** from the segment of **"Page Source"**, and then click **"OK"** to activate the TWAIN interface.











7. Scan the document and
- (1) Select **"More Pages"** for several more pages.
 - (2) Select **"Other Side"** for one more page.
 - (3) Select **"No more"** for the next step.



8. Save OCR-performed documents using the word-processor compatible formats such as **[*.rtf]** or **[*.txt]**.

(For models with SCAN BUTTONS only !)

Quick Reference ***How to use scan buttons?***

1. Open the lid cover and place the scanning object face down aligned with the center of the glass (where marked " ▽ "). Push the buttons on the scanner or click the buttons on PC's screen to perform the jobs you desire.
2.  **Preview** You can either click the Preview or press the Preview button on the scanner to evoke the Preview function. The scanner will automatically perform the tasks till showing the previewed image in the main window.
3.  **Color Scan** You can either click the Color Scan or press the Color Scan button on the scanner to evoke the Color Scan function. The scanner will automatically perform the Preview, do the auto-edging, and display the scanned image.
4.  **Copy** You can either click the Copy or press the Copy button on the scanner to evoke the Copy function. The scanner will automatically scan the document image and print it out via default connected printer.
5.  **OCR** You can either click the OCR or press the OCR button on the scanner to evoke the OCR function. The scanner will automatically activate the TextBridge application, scan the document, and recognize the document.
6.  **Fax** You can either click the Fax or press the Fax button on the scanner to evoke the Fax function. The scanner will automatically scan the object and activate the fax driver. Key in Subject and Message as well as fax number or destination address are necessary.
7.  **E-mail** You can either click the E-mail or press the E-mail button on the scanner to evoke the E-mail function. The scanner will automatically scan the object and activate the MS Exchange application. Key in Subject and Message as well as E-mail Address are necessary.
8.  **Enable / Disable** Selecting the Enable will allow your PC polling to the scanner. When the scanner is not in use, we recommend you to select Disable polling so that your PC system's performance could be highly utilized.
9.  **Setup** You can customize the definition for each key by clicking the "Choose Your Key" window. Using Add button to add additional applications and Remove button to remove the applications. Reset button will reset all button definitions to the default settings.
10. If you have any further questions, please refer to the **On-line Help**.

Installation

1. Scanner not found or cannot scan:

- 1.1 Check if the scanner is correctly connected to the computer.
- 1.2 Check if the power switch is ON.
- 1.3 Check if the light inside the scanner is ON.
- 1.4 Check if the Source/TWAIN Driver is selected in the bundled Software Photo Express 2.0 Refer to "How to Scan" item 3~5).
- 1.5 If the scanner is connected through the parallel port:
 - * Set the parallel port mode in the BIOS to EPP or ECP+EPP 1.9, which can speed up the scanner.
 - * Check whether the TWAIN/Driver has conflicts with the printer driver (Uninstall the printer driver and check if the scanner is working).
- 1.6 If the scanner is connected through the USB port (USB supported models only):
 - * Check if USB is enabled in the BIOS.
 - * Check if USB is installed in Windows 95(Release Version 4.00.950 B or OSR2) or Windows 98 (Start / Settings / Control Panel / System / Device Manager / Ports / USB). If not, install USB.
 - * If the scanner is still not working, try another USB port.
- 1.7 If "Twain error (T009)...." Or "Scanner not found" message is still shown:
 - * Close all applications
 - * Uninstall any other scanner driver if there is, and uninstall other Image Editing Software program because there may be conflicts between new version and old version Twain related files.
 - * Re-install scanner driver and Photo Express 2.0 or other application programs.

Quick Reference **Trouble Shooting**

2.How to connect the printer to the scanner?

If you connected your scanner to PC by parallel port, your printer cable can be connected to the printer pass-through port located in the rear of scanner. If you connected your scanner to PC by USB port, please connect your printer directly to your PC by parallel port or USB port.

Scan

3.What if the scanning speed of the scanner is exceptionally slow?

Check the "About" button on the upper-left side of the TWAIN interface. If the Communication Mode is set under SPP mode, please change it to EPP (Version 1.9 recommended) in the BIOS system when you start your PC. (Some systems may not support EPP mode. In this case, all setting will be auto-set as SPP in TWAIN.)

4.What if the preview result is an incomplete image?

Adjust the length of the preview area by using your mouse to adjust the red line on the ruler of the main preview window.

5.What if the scanning result is in black?

- * Check if the original document is placed in the scanner.
- * Check if the lamp is ON.
- * Check if the scanner module is moving.

OCR

6.What if the OCR software can't recognize the document (clearly)?

- * Check if the document is placed in the right direction.
- * Check if the original document is illegible enough.
- * Set the resolution at 150dpi or higher (300dpi).
- * Be sure to set the scanning mode at Black/White.

Quick Reference ***Trouble Shooting***

Usage Suggestion

7. Does the scanner support Windows 3.x?

This scanner does NOT support Windows 3.x and it is also mentioned in the product specification of the packaging.

8. My printer is not functioning if I connect it from the scanner, but it works properly when I connect it directly to the PC?

The printer or its driver might need a dedicated printer port. Please add another parallel port card or use USB port instead.

Quick Reference ***Notice***

Please use the safety regulation-compliant adapter included in the package supplied by the Manufacturer. The Manufacturer is not held any responsibility for the loss, damage or problems caused by using adapters not provided by the Manufacturer.

SmartKey

The **SmartKey** includes 6 function keys which correspond to the buttons on the scanner and could be also acquired at the bottom right corner of the Windows screen. You can simply click on the Icon or press the button on the scanner to perform any scanning-related tasks. You can also adjust the default settings to achieve the best performance of the scanner.

The 6 functions are:

Copy

Fax

E-mail

Color Scan

OCR

Custom

And there are also another button in the **SmartKey**:

Enable / Disable



Copy

The Copy button provides the quickest way to scan a document and print it out using a connected printer, like a copy machine. See the Custom section to learn more about how to set up your printer driver.

When you click on the Copy icon, or press the Copy button on the scanner, you activate the scanner automatically using the following process:

1. Scan document / image
2. Print it out via default connected printer.

The default settings of Copy button are:

Scan size: A4, 8.5 x 11.7 inch (216 x 297 mm)
Resolution: 300 dpi
Scan Mode: Black and White



Fax

The Fax button provides the quickest way to fax a scanned document using the connected modem or LAN. See the Custom to learn how to set up you fax driver.

When you click on the Fax, or press the Fax button on the scanner, you activate the scanner automatically using the following process:

1. Scan the object
2. Select in More Page Dialog by user
3. Go to Fax Driver

To complete the fax action, key in Subject and Message, select fax number or destination address are necessary.

The default settings of the Fax button are:

Scan size:	By auto-edging
Resolution:	300 dpi
Scan Mode:	Black and White



E-mail

The E-mail button provides the quickest way to send a scanned document or image file using the connected modem or LAN.

When you click on the E-mail Icon, or press the E-mail button on the scanner, you activate the scanner automatically using the following process:

1. Preview and auto-edge
2. Scan the selected area
3. Select in More Page Dialog by user
4. Go to MS Exchange to send attached file(s)

To complete E-mail function, user should be familiar with MS Exchange applications. Key in Subject and Message as well as E-mail Address are necessary.

The default settings of the E-mail button Icon are:

Scan size:	By Auto-edging
Resolution:	75 dpi
Scan Mode:	Color



Color Scan

The Color Scan button which provides the quickest way to scan a **photo**, **A4** or other size image. When you click on the Color Scan Icon, or press the Color Scan button on the scanner, you activate the scanner automatically according to following process:

1. Activate Photo Express 2.0
2. Evoke TWAIN UI (User Interface)
3. Scanner Previews and auto-edges the previewed image (or adjust area by mouse)
4. Scan the selected area of the image
5. Close UI and display the scanned image.

The default settings of Color Scan are:

Scan size: By Auto-edging

Resolution: 300 dpi

Scan Mode: Color

If you are satisfied with the scanned image, save the image file into the hard disk for any image editing. Otherwise, relocate your scanning object and perform the scanning again, or use the Main UI to perform more specific tasks.



OCR

The OCR button provides the quickest way to perform OCR function.

When you click on the OCR Icon, or press the OCR button on the scanner, you activate the scanner automatically using the following process:

1. Activate TextBridge OCR
2. Evoke TWAIN UI
3. Scan the object [GO]
4. Close UI and display the scanned image
5. Recognize Document
6. Add more page?
 - No: Save the file by Key in File Name as .rtf format
 - Yes: Evoke TWAIN UI and continue above steps

Then use your word processor to edit the file.

The default settings of OCR function are:

Scan size:	A4, 8.5 x 11.7 inch (216 x 297 mm)
Resolution:	300 dpi
Scan Mode:	Black and White



Custom

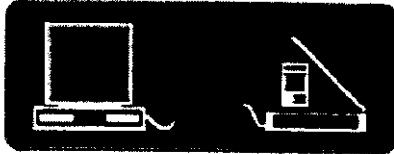
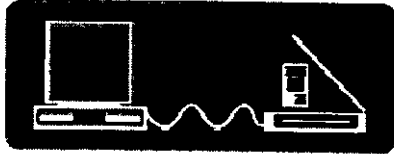
This Custom page allows the user to customize the definition for each key. User chooses which key to be customized from the "**Choose Your Key**" window and set the desire action for this key from the list box below.

The **Add** button allows user to add additional applications for the **SmartKey** to launch. The **Remove** button removes applications in the list box.

When the **OK** button is pressed, a new icon for the action the user chooses will replace the old icon on the main window's **SmartKey** button.

When the **Reset** button is pressed, all button definitions will be reset to the default settings.

Moreover, Custom page also allows the user to select an appropriate **Printer Driver** or **Fax Driver**. All available drivers will be listed in the window both for printer and fax machine. Make sure your default connected devices are correctly installed. Then press **OK** to complete the setup.



Enable / Disable

The Enable/Disable Icon allows user to enable or disable the polling from PC to scanner. When you select Enable, polling from PC to scanner is activated. If you are not going to use the scanner, we recommend user to select Disable polling so that your PC system's performance could be highly utilized. The small Icon at the bottom right corner shows the polling status.

Understanding the functions listed above will help you know how to use the **SmartKey**.

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